



Joslin Clinic

Affiliated with
Beth Israel Deaconess Medical Center

e-Health Initiative Awards

October 11, 2007

Improving population health

JoslinCare

Joslin Clinic

- Nation's oldest and largest healthcare organization dedicated to to care and research specifically in diabetes
- Ambulatory care, basic research, clinical trials and clinical research
- 80,000 ambulatory visits per year
- Endocrinology, nephrology, behavioral medicine, education, exercise, ophthalmology, and specialty programs
- Clinically affiliated with Beth Israel Deaconess Medical Center, Children's Hospital Boston
- Teaching affiliate of Harvard Medical School

Challenges of caring for patients with diabetes

- **Management of core disease and associated multi-system complications**
- **Management in accordance with national quality indicators**
- **Active patient participation to achieve sustained lifestyle and behavioral change**
- **Multiple care providers and specialties involved in care planning and management**
- **Multiple sites of care typically involved in care management**
- **Large population and individual care management**
- **Meeting payer demands for P4P to maximize reimbursement**
- **Improving provider to provider quality of care**
- **Accessing data for clinical research and industry sponsored trails**

Joslin Goals

- **Engage providers across the continuum to coordinate care plans, and to share information relevant to individual specialties and the patient's overall health;**
- **Implement workflow processes, tools and alerts to ensure provider adherence to clinical guidelines;**
- **Enhance the delivery of care and measurably improve clinical outcomes;**
- **Create a bridge between basic research, clinical research and clinical care.**

Joslin Solution

- **EMR utilizing**
 - Discrete data
 - Customized programming
- **Data collection as discrete data to create patient report cards**
 - Migrating to patient portals
- **Template design to accommodate multiple provider-type data entry**
- **Patient care plans**
- **Individual provider performance**
- **Aggregate departmental performance**

Blood Glucose Monitoring [more detail...](#)

Work with Healthy Living Goals

Meter: **Glucometer Elite** monitoring frequency: **5 or more times pe**

Blood glucose records: ☐ Yes ☐ No

Blood glucose assessment:

A1c assessment:

Treatment Plan:

☐ lifestyle only ☒ oral agents ☐ Byetta

☒ insulin **Pump Basal/I:CHO** > **Print** ☒ pump **01/04/2006**

[hyperglycemia:](#) ☐ correctly treats

[hypoglycemia:](#) ☐ correctly treats

threshold: ☐ unaware

Most Recent A1c

.00 / / ☐ Check if outside lab value
.00 / /

Glucose Test Results - Summary Values

	Breakfast		Lunch		Supper		Bedtime	
	Before	After	Before	After	Before	After	Before	After
Low	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
High	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Average	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Blood glucose [monitoring](#) plan:

Patient will monitor: times per day ☐ pre- ☐ post-breakfast ☐ pre- ☐ post-lunch ☐ pre- ☐ post-dinner

☐ check right before and hours after a different meal each day.

☐ call ☐ fax ☐ email blood glucose results from days

☐ 1-on-1 JCP appt. ☐ 1-on-1 RN appt. Classes: ☐ BGAT ☐ First Steps

Start: ☐ insulin ☐ byetta ☐ symlin Consider/next visit: ☐ insulin ☐ byetta ☐ symlin ☐ increase monitoring

Diabetes description:

Details: (copy-forward)

Type 2 DM with obesity, dysliobesity. managed on metformin 500 mg bid. Noncompliant to diet or exercise.

Assessment:

Plan: ☐ Copy to Self Management Plan

< JoslinCare Summary

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Nutrition and Phys Activity>

Vitals

Main Toolbar

Visits Demographics

New Lock

Sign In

09/14/2007 08:35

09/14/2007 08:35

09/13/2007 03:19

09/13/2007 03:17

09/13/2007 03:04

09/13/2007 03:02

09/13/2007 02:55

Initial Review

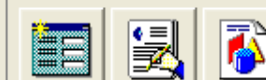
Sign In

Jc Bgm

Jc Monitor

09/13/2007 02:55

Default



Monitoring

Reason

- ☐ new to monitoring
☐ review of meter
☐ review of alternate site testing
☐ meter change

Presently using

New meter

incorrect: ☐ date/time ☐ codestores strips appropriately: ☐ Yes ☐ Nochanges codes: ☐ Yes ☐ Nouses control solution: ☐ Yes ☐ No

Instruction provided

Demonstrated new meter to patient per Joslin guidelines: ☐ finger ☐ alternate siteAble to return demonstration of meter without difficulty: ☐ finger ☐ alternate site

- ☐ importance of logging results
☐ indications for alternate site checking
☐ use of control solution
☐ changing codes
☐ setting date/time ☐ set to correct time today
☐ storage of strips
☐ prescriptions given for lancets and scripts
☐ handouts given

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 - Initial Review
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 - Jc Monitor
 - Jc Not Ever

Default



Clinical Risk Indicators

Risks and Complications [more detail...](#)

< Handouts >

Recent Exams/Tests

performs self foot exams: ☒ Yes ☐ No
 frequency: weekly
☒ examined feet, no ulcers present
☒ reviewed importance of examining feet
 ophthalmologist eye exam in past year: ☐ Yes ☒ No Date: 04/14/2006
 JVN eye exam in past year: ☐ Yes ☒ No Date: 12/22/2004
 receives annual dental exam: ☒ Yes ☐ No
 annual flu vaccine: ☐ Yes ☒ No Date: 05/22/2006
 received pneumovax: ☐ Yes ☒ No Date: 09/16/2004
 use of daily aspirin: ☐ Yes ☒ No
 aspirin contraindication: Conflicting Medication
 understands DM and kidney dz: ☒ Yes ☐ No, GFR: / /
 stage, kidney disease:
 recent stress test: ☒ Yes ☐ No Date: 02/12/2006

Additional Details

Classes: ☐ Cholesterol Class ☐ Keeping Kidneys Healthy
 appointments: ☐ Podiatry ☐ Ophthalmology ☐ JVN ☐ Gerontology ☐ Cardiology ☐ Renal consult
☐ Pregnancy ☐ pregnant ☐ preconception
 check BP at home, frequency: start lipid lowering agent - see meds stop meds for pregnancy planning
 start ACE/ARB - see med list continue lipid lowering agent - see meds
 stress test start daily aspirin
 vaccine: at Joslin at PCP Pneumovax: at Joslin at PCP

Nutrition and Exercise

Warning, Motivation, Barriers

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Past Medical Hx>

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- 09/17/2007 12:59
- 09/17/2007 12:59

Default



File Edit Default View Tools Utilities

BOSTON OFFICE

Joslin Care Team: 4

Reason for Visit:

Diabetes Description

DM Type 2 ICD9 250.02

Dx DM uncomplicated, Type 2, unctrl

Current A1c on

JoslinCare status Maintenance

☒ override High

Patient appointments/orders Active

Order/Appointment

First Steps (DSMT)

Foods that Fit (DSMT)

Individual appointment with a nurse

Individual Nutrition appointment

Ophthalmology appointment

Clinical plan All All today This

Plan

Ed Assessment>

Patient Quality

Clinical Risk Indicators

All fields on this template are read-only. Please proceed to the appropriate template to update information.

Most Recent

A1C: %

LDL: mg/dl

ALT: IU/l

Blood Pressure: 138 / 83 07/16/2007

Serum Creatinine: mg/dl

Estimated GFR: ml/min/1.73m²

Prot./Creat. Ratio:

3 Microalbumins: mcg/mg

Most Recent

Joslin Foot Exam: 02/12/2007

Podiatry Exam: / /

Dilated Eye Exam: 04/14/2006 **Result:** normal

JVN Eye Exam: 12/22/2004

Flu Shot: 05/22/2006

Pneumo Vaccine: 09/16/2004

EKG: 08/15/2003

Stress Test: / /

Currently Smoking: No

Aspirin Therapy: No **Reason:** Conflicting Medication

For education appointment history, please visit the Education Assessment template.

OK

Relationship

present

Relationship

Relationship

Cancelled

Relationship

Monitoring >

Treatment Plan >

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Initial Review

Sign In

Jc Bgm

Jc Monitor

Jc Nut Ever

Default

Calendar icon

Document icon

Report icon

Medical icon

Pharmacy icon

Lab icon

Plan Summary

BLOOD GLUCOSE MONITORING/GLUCOSE CONTROL

Patient will monitor: times per day ☐ pre- ☐ post-breakfast ☐ pre- ☐ post-lunch ☐ pre- ☐ post-dinner
☐ increase monitoring ☐ check right before and 2 hrs. after a different meal each day

Classes: ☐ First Steps ☐ BGAT ☐ 1-on-1 JCP appt. ☐ 1-on-1 RN appt.

start: ☐ insulin ☐ byetta ☐ symlin Plan **Pump Basal/I:CHO** > Print consider/next visit: ☐ insulin ☐ byetta ☐ symlin

A1c every ☐ 3, ☐ 6, ☐ 9 months ☐ screening labs ☐ liver function tests ☐ antibodies for typing

Contact office if unexplained ☐ low ☐ high ☐ blood glucose greater than

☐ call ☐ fax ☐ email blood glucose results for next days ☐ Rx for ketostix ☐ carry 15g of fast-acting carb

☐ follow-up with PCP, return if glycemic control not at goal

☐ continue current plan ☐ follow up with Joslin MD/NP: send To-Do to registration ==>

DM Description

Assessment

Plan

☐ Copy to Self Management Plan

NUTRITION PLAN

Classes: ☐ What can I eat? ☐ Foods that Fit ☐ Matching I:CHO

☐ Nutrition Tune-Up ☐ Cholesterol class

☐ 1-on-1 RD appt. clear> ☐ lose ☐ gain weight, goal:

☐ follow meal plan ☐ keep food records

☐ continue current plan ☐ obesity dietary guidelines

Assessment:

Plan:

☐ Copy to Self Management Plan

PHYSICAL ACTIVITY PLAN

Class: ☐ Exercise Basics ☐ obtain cardiology clearance

☐ continue current exercise plan ☐ 1-on-1 EP appointment

☐ increase frequency of exercise to times per week

☐ increase duration of exercise to minutes per session

Assessment:

Plan:

☐ Copy to Self Management Plan

Classes:

RISKS AND COMPLICATIONS PLAN

Appointments:

☐ Cholesterol Class ☐ Keeping Kidneys Healthy

Flu vaccine: ☐ at Joslin ☐ at PCP ☐ Pneumovax: ☐ at Joslin ☐ at PCP

☐ check BP at home, frequency:

☐ start lipid lowering agent - see meds ☐ stop meds for pregnancy planning

☐ stress test ☐ start daily aspirin ☐ continue lipid lowering agent - see meds

☐ Renal Consult ☐ Podiatry ☐ Gerontology

☐ Cardiology ☐ Ophthalmology

☐ Pregnancy ☐ Pregnant ☐ Preconception

☐ start ACE/ARB-see med list

LEARNING, MOTIVATION, BARRIERS

☐ follow up with current counselor

☐ mental health evaluation today

☐ refer to mental health

☐ review issues identified in PAID/SCI at next visit

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Main Toolbar

Visits Demographics

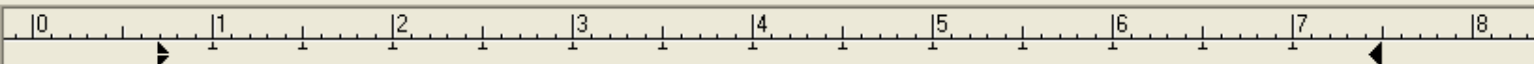
New

Lock

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- Initial Review
- Sign In
- Jc Bgm
- Jc Monitor
- Jc Nut Ever

Default



**Joslin Clinic**Affiliated with
Beth Israel Deaconess Medical Center**TEST TEST's JoslinCare Plan**

Thursday, September 13, 2007

Name: TEST TEST

DOB: 01/03/1923

MR#: 999998

Healthy Living Goals

I will do the following to improve my diabetes self management:

- Increase the duration of exercise to 30 minutes per session.
- Lose weight, 5 lbs.
- Start insulin.
- Increase the frequency of monitoring blood glucose levels
- Contact your Joslin physician office if you have unexplained high or low blood glucose.
- Start insulin.
- Increase the frequency of exercise to 3 time per week.
- Check blood glucose directly before and 2 hours after a different meal each day
- Monitor 6 times per day, pre-breakfast, post-breakfast, pre-lunch, post-lunch, pre-dinner, post-dinner.
- Measure and record blood pressure at home daily.
- Increase the frequency of monitoring blood glucose levels
- Monitor 4 times per day, pre-breakfast, pre-lunch, pre-dinner.

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Default



	A	B	C	D	E	F	G	H	I	
120	Eye OD New	<14	0	3	7	16	6	5	12	
121	Eye OD Est.	<21	0	7	6	21	5	5	24	
122	Renal MD New	<14	3	7	3	9	8	5	10	
123	Renal MD Est.	<21	4	3	3	5	7	5	5	

[illegible][illegible]

148	Average HbA1c for patients seen in return visits during the month (+/- 2.0 s.d.)	NA	7.73	7.73	7.84	8.00
-----	--	----	------	------	------	------

149	% Patients seen with most recent A1c <9.0%	>79%	76%	74%	58%	78%
-----	--	------	-----	-----	-----	-----

150	lipid profile in the past year	>80%	85%	85%	85%	84%			
-----	--------------------------------	------	-----	-----	-----	-----	--	--	--

[illegible][illegible][illegible]

155	% patients with creatine clearance <60 with a confirmed renal	100%	NA	0%	17%	100%			
-----	---	------	----	----	-----	------	--	--	--

156	% of all patients seen this month who had a dilated eye exam in the past year	>61%	68%	73%	85%	87%
-----	---	------	-----	-----	-----	-----

157	% patients seen who had a visual foot exam	>80%	89%	87%	94%	94%			
-----	--	------	-----	-----	-----	-----	--	--	--

158	% Patients seen with BP <130/80	>50%	31%	41%	50%	52%			
-----	---------------------------------	------	-----	-----	-----	-----	--	--	--

192	New Patient Appointments	FY07 Target	OCI	NOV	DEC	JAN	FEB	MAR	APR
193	BEI New Patient Appointments		714	603	525	619	618	787	802

Ready

Reaping the investment of EMR

- **Inter-organizational communication**
- **E-prescribing**
- **Data warehousing for clinical research and clinical trials**
- **Patient self-service kiosks**

View: categories visits

PJP	Abrahamson MD, Martin J
AD IIP	Smith-Ossman, Sherry
JC Partner	Thecla Gordon, RN, CDE
RH	Team 1 Nurse Educators
RD	
EP	
Renal Nurse	

Referring Phys. Request Change

Ph: () - Fax () -

PCP Request Change

Ph: () -		Fax () -	
-----------	--	-----------	--

Physician Information

☒ Patient has been counseled as to the importance of having a PCP.

☐ Health care proxy on file.



Other People Involved in Patient's Care














Relationship	First Name	Last Name
daughter	Mary G	
spouse	Robert	Smith
nurse	Katie	Smith

CareWeb

[JoslinCare Summary >](#)[Treatment Plan >>](#)Main Toolbar

Visits | Demographics

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 Jc Monitor
 Jc Nut Exe

Default

Problem List	ICD-9 Code	Most Recent Status
DM uncomplicated, Type 2,	250.02	Poor Control
Obesity, unspecified	278.00	Worsening
Hypertension, essential NO	401.9	New
Hyperlipidemia	272.2	Poor Control

More

Patient Communications

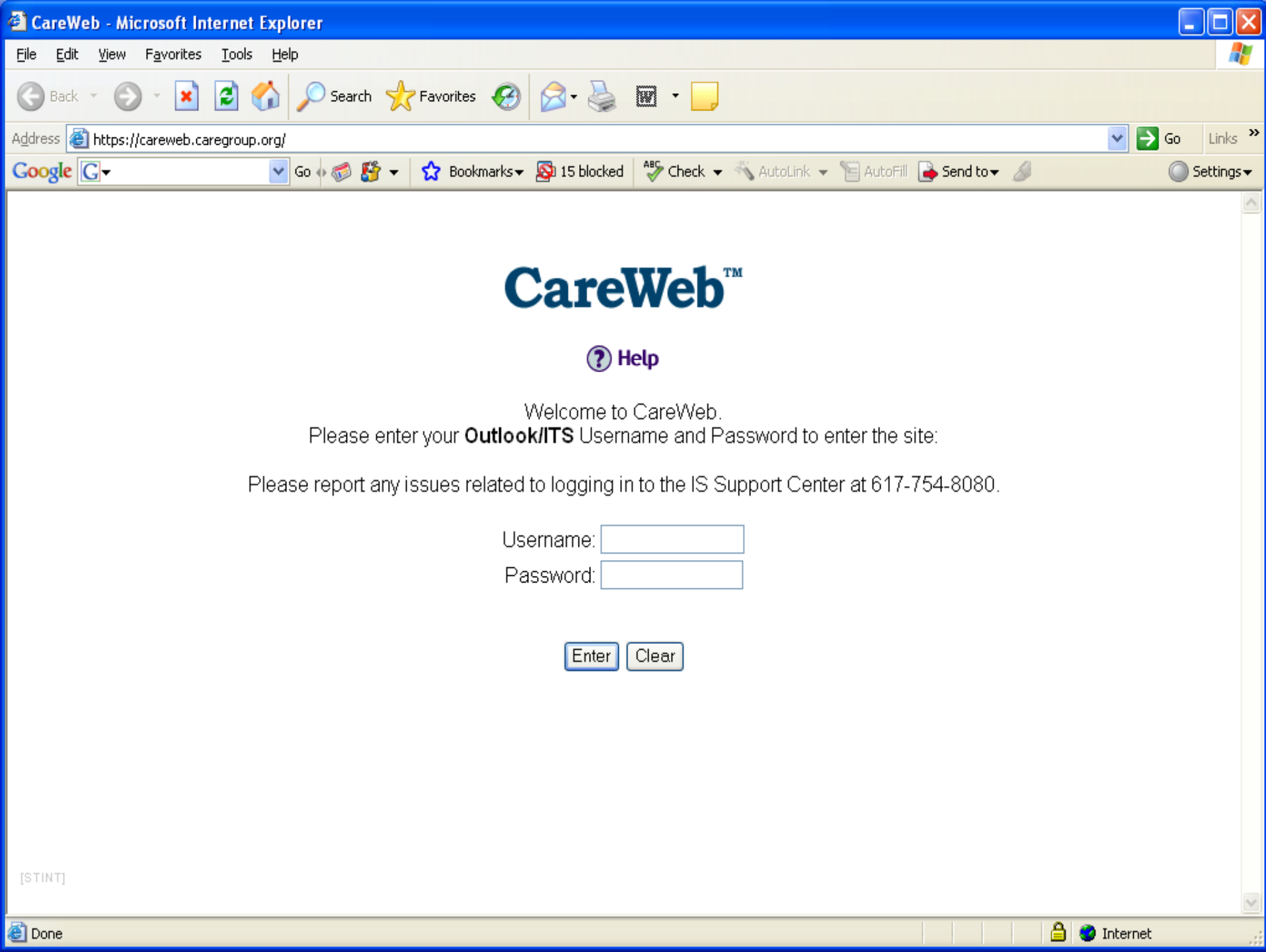
Communications

Labs

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Vitals

Ready



CareWeb™

? Help

Welcome to CareWeb.

Please enter your **Outlook/ITS** Username and Password to enter the site:

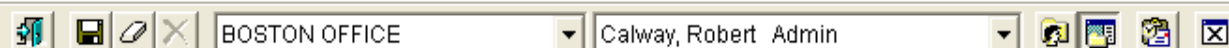
Please report any issues related to logging in to the IS Support Center at 617-754-8080.

Username:

Password:

Enter

Clear



Medications Summary Table

start_date	date_stopped	brand_name	generic_name	dose	rx_unit	sig_codes	provider
11/1/2007	11/1/2007	Lantus OptiClik	Lantus OptiClik	5x3mL Pen			PALO
11/1/2007	11/1/2007	Byetta 5mcg prefilled pen	Exenatide 5mcg prefilled pen	1.2mL		bid	PALO
04/12/2007	11/1/2007	TYLENOL	ACETAMINOPHEN	160MG			TOAN
11/1/2007	11/1/2007	INDERAL	PROPRANOLOL HCL	20MG		qd	jode
03/15/2007	04/12/2007	TYLENOL	ACETAMINOPHEN	160MG			ELQ
03/15/2007	11/1/2007	LC5000 PLUM SOLUSET	IN-LINE BURETTE SET				ELQ
01/26/2007	11/1/2007	HUMALOG	INSULIN LISPRO,HUMAN REC.ANLOG	300 U/3ML		ad	EMB
01/26/2007	11/1/2007	LASIX	FUROSEMIDE	40MG		qd	EMB

Add New Allergy

Drug Allergies

Visit Date:Time	Allergy Comment	Description
09/27/2006 11:37 AM		CODEINE HCL
02/03/2006		SULFA (SULFONAMIDES)

Environmental Allergies

eqd

Details:

Phone Call	Telecom	Vitals	Education	Pharmacy Info	Pump Follow-Up	Handouts
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< HPI

< DM Care

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Dr. First

Main Toolbar

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Initial Review

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Jc Bgm

 Jc Monitor



Is Not Ever



Default

11/11/2016

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news